~~Patent Claims~~ What is claimed is:

~~1. An apparatus for immediately outputting the~~ response of a synchronous system (1) to an asynchronous event,
characterized by
an advanced calculation device (2) by means of which the responses of the synchronous system to possible asynchronous events can be calculated in advance, and by a switching device (3) by means of which the output signal from the advanced calculation device or the output signal from the synchronous system can be passed on selectively.

2. The apparatus as claimed in claim 1,
characterized in that
the switching device (3) has at least two input connections (E1, E2), one of which is connected to the output connection of the synchronous system (1), and at least one of which is connected to the output connection of the advanced calculation device (2).

3. The apparatus as claimed in claim 2,
characterized in that
the switching device (3) has a control connection (C), via which it is possible to define which of the input signals is intended to be passed on.

4. The apparatus as claimed in one of the preceding claims,
characterized in that
this apparatus is designed to output the output signal from the advanced calculation device (2) in response to the occurrence of an asynchronous event.

5. The apparatus as claimed in one of the preceding claims,
characterized in that
this apparatus is designed to output the output signal from the synchronous system (1) as soon as this signal represents the response to the event which was ~~responded to by outputting the~~

output signal from the advanced calculation device (2).

6. The apparatus as claimed in one of the preceding claims,
characterized in that
the synchronous system (1) is designed to output the response to the event which had to be responded to, sufficiently early that the advanced calculation device (2) still has sufficient time to predict the response of the synchronous system to a next event before it occurs.

7. The apparatus as claimed in one of the preceding claims,
characterized in that
the advanced calculation device (2) is designed to complete advanced calculations that need to be carried out, before the occurrence of the event for which the response of the synchronous system (1) needs to be calculated in advance.